

## BL-UDF-800 -86 °C Ultra Low Temperature Freezer



- ✓ TARGETED REFRIGERATION
- ✓ Fast Refrigeration
- ✓ Energy-saving & Environmentally Friendly
- ✓ Super-stable Cooling System
- ✓ Advanced thermal insulation
- ✓ Multi-layer sealing design
- ✓ Graphical curve for historical temperature data
- ✓ Removable heat exchanger

### Temperature Control Technology

#### Upright Ultra-low Temperature Freezer

- Two-compressor cascade refrigeration system.
- Temperature maintenance: -40°C~-86°C with 0.1°C accuracy.
- Working ambient temperature: 10°C~32°C.
- Accurate Temperature Control Technology
- System can achieve optimum temp. (-70°C) in less than 60 min during storage of the samples at full capacity

### Security and Access Control

- RFID access for electronic door opening.
- Keyboard lock, password protection (200 user IDs).
- Built-in backup battery for 72-hour operation without AC power.

### Storage Capacity

- Minimum 800 liters capacity.
- Loading capacity of minimum 60,000 samples (2ml)

### Construction and Materials

- Rust-free construction (interior and exterior).
- Inner material: Stainless steel 304.
- Shelves: Adjustable, stainless steel 304.

### Alarms and Monitoring

- Visual and audible alarms for various conditions.
- Power failure protection and delay.
- Test holes for CO<sub>2</sub>/LN<sub>2</sub> and external monitoring.
- The universal casters and leveling feet design are more convenient for movement and fixation.

### Security and Access Control

- Digital control panel at eye level.
- 7 inches LCD touch screen with multiple display features.
- Eco Mode & High-Performance Mode.

### Technical Specifications

- Compressors: Minimum 2 cascading compressors (1 HP each).
- Noise level:  $\leq 53$  decibels.
- Certification: CE and ISO certification or equivalent.
- Wide voltage range: 187V~242V.

### Warranty and Documentation

- 3-year warranty.
- Compressor warranty: 3 years.
- Supplied with 5 KVA online UPS.
- Requires 5 relevant order copies from renowned Government institutes.

### Size and Dimensions

- Internal Size: 1300 x 850 x 1650 mm (WDH).
- External Size: Less than 1600 x 1260 x 2300 mm (WDH).

### Additional Features and Accessories

- Manual defrost system.
- A4 paper slot, hand-written art-board.
- RS485 port for data communication.
- Castors for easy moving and fixation.
- Removable condenser front cover.
- Test hole for temperature monitoring systems.



## Specifications

| Basic                        |                                                |
|------------------------------|------------------------------------------------|
| Cooling type                 | Direct Cooling                                 |
| Defrost                      | Manual                                         |
| Temperature range            | -40°C~-86°C                                    |
| Ambient temperature          | 10~32°C                                        |
| Display                      | 7" LCD touch screen                            |
| Access port QTY/Dia.         | 1/25mm                                         |
| USB Access                   | Y                                              |
| Remote alarm Access          | RS232/485                                      |
| Outside material             | Color sprayed steel                            |
| Inside material              | SUS304                                         |
| Castor                       | Universal                                      |
| Refrigeration System         |                                                |
| Refrigerant                  | CFC-free, HCFC-free non flammable refrigerants |
| Temp, controller             | Microprocessor                                 |
| System                       | Cascade system                                 |
| Sensor                       | PTC                                            |
| Compressor brand/QTY         | SECOP/2                                        |
| Capacity(L/cu.ft)            | 800/28.25                                      |
| Insulation                   | PURF+VIP                                       |
| Inner door material/QTY      | Foamed SUS304/2                                |
| Racks                        | 20(5x4)+8(6x4)                                 |
| Boxes (2 Inches)             | 504                                            |
| Samples(2ml)                 | 50,400                                         |
| Alarms                       |                                                |
| High/low temperature         | Y                                              |
| Power failure                | Y                                              |
| Abnormal voltage             | Y                                              |
| Sensor error                 | Y                                              |
| Door ajar                    | Y                                              |
| Filter screen check          | Y                                              |
| Thermostat failure           | Y                                              |
| Low battery                  | Y                                              |
| Condenser clean              | Y                                              |
| High ambient temperature     | Y                                              |
| Door ajar                    | Y                                              |
| Power failure backup (alarm) | 72h                                            |
| Electrical Data              |                                                |
| Voltage frequency(V/Hz)      | 187V~242V 50Hz/60Hz                            |
| Power(W)                     | 710W                                           |
| Current(A)                   | 8.48A                                          |
| Power consumption            | 14.98kWh/24h                                   |
| Noise(db)                    | 53                                             |
| Dimensions                   |                                                |
| Exterior size(W*D*H) (mm)    | 1600 x 1260 x 2300 mm                          |
| Interior size(W*D*H) (mm)    | 1300 x 850 x 1650 mm                           |
| Shipping CBM                 | 2.8                                            |
| N.W/G. W(kg)                 | 300/370                                        |